

PROJECT DESCRIPTION

GENERAL
THIS PROJECT INVOLVES UPGRADATION OF EXISTING PEDESTRIAN SIGNAL CONTROL TO APS/ CPS AT THE INTERSECTION OF MD 197 (LAUREL BOWIE ROAD) AND OLD CHAPEL ROAD IN PRINCE GEORGE'S COUNTY.

APS AND CPS WILL BE ADDED FOR THE NORTH, SOUTH AND EAST LEGS OF THE INTERSECTION AND ADA COMPLIANT RAMPS WOULD BE INSTALLED AT THE INTERSECTION. THE EXISTING TRAFFIC SIGNAL INDICATIONS WOULD BE UPGRADED TO NEW LED TRAFFIC SIGNAL INDICATIONS.

INTERSECTION OPERATION
THE INTERSECTION OPERATES IN A NEMA SIX PHASE, FULLY -ACTUATED MODE, WITH THE MD 197 APPROACHES RUNNING CONCURRENTLY. EXCLUSIVE LEFT TURN PHASES ARE PROVIDED FOR BOTH APPROACHES OF MD 197 (LAUREL BOWIE RD). AN ALTERNATE PEDESTRIAN PHASE WITH PUSH BUTTON ACTUATION IS PROVIDED ACROSS BOTH LEGS OF MD 197 (LAUREL BOWIE RD). THE OLD CHAPEL ROAD APPROACHES RUN CONCURRENTLY. THE PEDESTRIAN PHASE ACROSS OLD CHAPEL ROAD IS CONCURRENT. EMERGENCY PREEMPTION IS ASSIGNED TO SB MD197 (LAUREL BOWIE RD).

APS NOTES

1. PUSH BUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
2. THE 10' SEPARATION BETWEEN PUSH BUTTONS IS TO BE MEASURED FROM FACE OF PUSH BUTTON TO FACE OF PUSH BUTTON, NOT CENTER TO CENTER OF POLE.
3. PUSH BUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSH BUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
5. THE DETECTABLE WARNING SURFACE SHALL BE ALIGNED WITH THE CROSSWALK.
6. APS WILL FUNCTION AS FOLLOWS: TO CROSS MD 197
A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSH BUTTON FOR AN EXTENDED TIME, THE PUSH BUTTON MESSAGE WILL BE "WAIT TO CROSS LAUREL BOWIE AT OLD CHAPEL."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

APS WILL FUNCTION AS FOLLOWS: TO CROSS OLD CHAPEL ROAD
A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSH BUTTON FOR AN EXTENDED TIME, THE PUSH BUTTON MESSAGE WILL BE "WAIT TO CROSS OLD CHAPEL AT LAUREL BOWIE."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

EQUIPMENT LIST FOR CONTRACT NO. XX4495185

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM	QUANTITY	UNIT	DESCRIPTION
9571	6	EA	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
1002	550	LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1003	2	EA	REMOVAL OF EXISTING PAVEMENT LETTERS, SYMBOLS, ARROWS AND NUMBERS
5002	395	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5003	115	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
6001	200	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1300	SF	5 INCH CONCRETE SIDEWALK
8003	1	EA	2 WIRE CENTRAL CONTROL UNIT
8009	2	EA	ADJUST HANDHOLE TO GRADE
8010	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8011	4	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	6	LF	LED 16 INCH COUNTDOWN PEDESTRIAN HEAD
8015	36	EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8016	1	EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8027	50	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8028	90	SF	DETECTABLE WARNING SURFACES
8033	75	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8046	6	SF	INSTALL OVERHEAD SIGN
8055	650	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	700	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

C. ALL EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. BRIAN YOUNG
Assistant District Engineer - Traffic
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Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
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Mr. Augie Rebish
Utility Engineer
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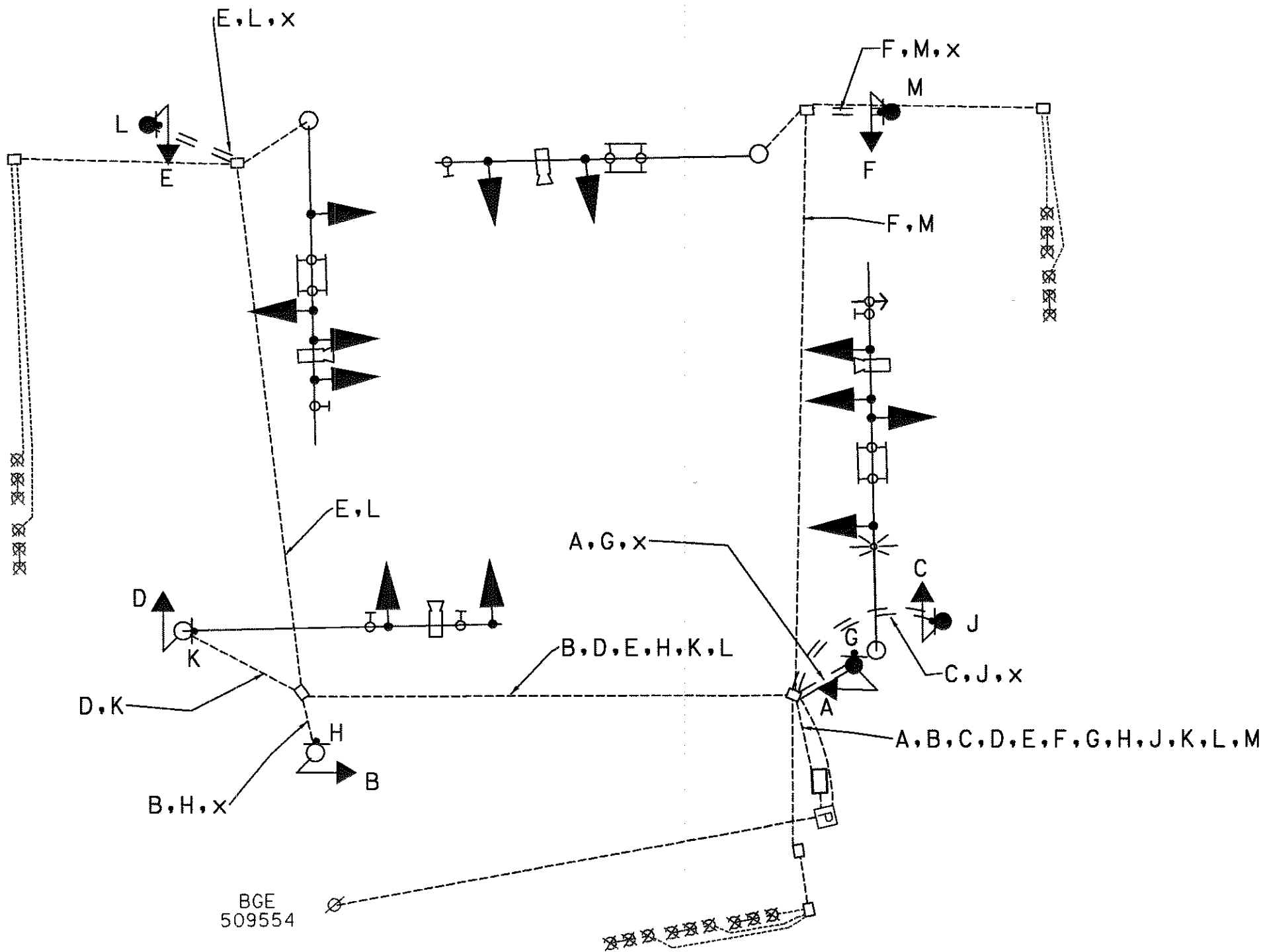
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Supervisor, Signal Operations
Phone: 410-787-7650

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 AND 5	←G-	←G-	R	R	←G-	←G-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 6 AND 2 & 5																		
PHASE 2 AND 5	←G-	←G-	G	G	←R-	←R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	←Y-	←Y-	G	G	←R-	←R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 1 AND 6	←R-	←R-	R	R	←G-	←G-	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←R-	←R-	R	R	←Y-	←Y-	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R-	←R-	G	G	←R-	←R-	G	G	R	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEARANCE	←R-	←R-	Y	Y	←R-	←R-	G	G	R	R	R	R	FLDW	FLDW	DW	DW	DW	DW
2 AND 6 CHANGE	←R-	←R-	Y	Y	←R-	←R-	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	←R-	←R-	R	R	←R-	←R-	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8 ALT	←R-	←R-	R	R	←R-	←R-	R	R	G	G	G	G	DW	DW	WK	WK	WK	WK
PED CLEARANCE	←R-	←R-	R	R	←R-	←R-	R	R	G	G	G	G	DW	DW	FLDW	FLDW	FLDW	FLDW
4 AND 8 ALT CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
EMERGENCY PREEMPTION PHASE 2 AND 5	←G-	←G-	G	G	←R-	←R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
EMERGENCY PREEMPTION PHASE 2 AND 5 CHANGE	←Y-	←Y-	G	G	←R-	←R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL / ←R-	FL / ←R-	FLY	FLY	FL / ←R-	FL / ←R-	FLY	FLY	FL / R	FL / R	FL / R	FL / R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A,B,C,D,E,F} 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
G,H,J,K,L,M} 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
x} 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE

TOD NO: XX449-17
SHA NO: PG728A55/C55
MD 197 @ OLD CHAPEL RD



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 197 (LAUREL BOWIE RD) @ OLD CHAPEL ROAD
TRAFFIC SIGNAL MODIFICATION

GENERAL INFORMATION PLAN SHEET

SCALE NTS ADVERTISED DATE 11-01-08 CONTRACT NO. XX4495185

DESIGNED BY NG COUNTY PRINCE GEORGE'S
DRAWN BY NG LOGMILE 16019704.03
CHECKED BY JB TMS NO. JH55
F.A.P. NO. TOD NO.

TS NO. 1784-C DRAWING - OF SHEET NO. 3 OF 3



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